LXVII.—Description of a new Species of Tree Trap-door Spider from Trinidad. By R. I. Россск.

[Plate XIX, figs. 1-3.]

MR. J. H. HART has recently sent for determination to the British Museum a small series of insects and spiders from Trinidad. Three species of spiders were represented in the series : one of them is the well-known Argiope argentata; a second appears to be Actinopus scalops of Simon; the third, however, a species of Pseudidiops, appears to be undescribed. I propose therefore to name it in honour of its discoverer. It may be diagnosed as follows :--

Pseudidiops Hartii, sp. n.

Colour.—Carapace olivaceo-piceous, with black posterolateral border and black ocular tubercles; abdomen purplish brown; legs mostly testaceous, but the whole of the patella and the distal end of the tibia black; tarsi reddish black; sternum and coxæ flavous, maxillæ and labium olivaceocastaneous.

Carapace smooth, high, the posterior portion sloping upwards to the deep crescentic fovea; the area immediately in front of this fovea abruptly elevated, deeply longitudinally sulcate, and furnished on each side with a single large setiferous puncture; the area of the carapace between these punctures and the anterior border nearly flat, but bearing the two elevated ocular tubercles, the area between the two tubercles only a little larger than the diameter of the anterior eyes of the posterior tubercle, which is furnished with a strong seta between these eyes.

Mandibles weak, smooth above, furnished in front with long stiff setæ, the inner angle above the base of the fang produced into a short spicular prominence; fangs short but robust.

Labium separated from the sternum by a deep depression, narrowed in front, its distal border rounded, beset with long stiff setæ and armed with a transverse row of four short conical spines, behind which are two less conspicuous but similar spines.

Maxillæ covered with stout conical spines. The femoral segment of the palp furnished internally with a few irregularly arranged long setæ, which distally increase in stoutness and become spiniform; the *patella* armed internally with two

long spines and furnished with a distinct tubercle externally; the tibia hairy beneath, but armed externally and internally with about two rows of strong spines; the tarsus similarly armed, the claw with a large basal tooth, which is itself also armed. The legs of the anterior pair armed like the palpi, except that the inner surfaces of the femur and patella are not armed with either spines or spiniform hairs and the anterior spines on the tibia are fewer. The second leg is, like the first, stout, the spines on the tibia still more reduced, those on the anterior surface becoming shorter and those on the posterior surface setiform and fewer. In the third leg there are a few small spines interspersed amongst the hairs on the anterior aspect of the patella and on the anterior and posterior aspects of the tibia; a few, too, only remain upon the proximal segment of the tarsus, which is, however, armed beneath with two strong long spurs. In the fourth leg the patella is armed with a few short spines in front and one behind; the tibia is furnished with setiform spines beneath and the proximal tarsal segment with a few long spines beneath. The claws of all the legs are armed with a large basal tooth, behind which, except in the posterior claws of the first and second leg, there is a second minute tooth.

The *abdomen* high and rounded. The anterior spinners shorter than the basal segment of the posterior, which are stout, three-jointed, and conical.

Length of carapace 6.5 millim., width 6; length of abdomen 8, width 6; length of maxillipede 12.8, of first leg 15.2, of second and third 13.8, of fourth 20.

Of this interesting genus *Pseudidiops*, with which *Dendricon* of Cambridge is synonymous, two species have been described *, and these are very probably identical.

Simon's original specimens were from Cayenne, and he has subsequently obtained the species from Venezuela. Unfortunately his description is very brief and is not accompanied by figures; so it is only possible to point out that this torm from Trinidad appears to differ from his *opifex* in having the legs flavous and ringed with black. By the same character it may be recognized from the British-Museum example from Bahia, which Mr. Cambridge has described as *Dendricon rastratum* in the Proc. Zool. Soc. 1890, p. 623.

Dendricon rastratum, Cambridge, Proc. Zool. Soc. 1889, p. 250.

(The description of *Pseudidiops* appeared on Sept. 11th, that of *Dendricon* on Oct. 1st. The former therefore has the priority.)

^{*} I'seudidiops opifex, Simon, Ann. Soc. Ent. Fr. (6) ix. p. 215 (1889).

But it further differs from this last-named specimen in having the cephalothorax less elevated, a smaller distance between the two ocular tubercles, the eyes on the posterior tubercle set more closely together, and in possessing fewer spines on the labium.

The nest of this species, which was sent with the specimen, appears to resemble that of P. rastratus from Bahia. It is a short tube permanently closed at the bottom, with a hinged door at the entrance formed of closely woven silk threads, and perfectly smooth inside. The length of the tube from the hinge-margin to the bottom is only about twice the greatest diameter of the aperture. The surface by which it was attached to the tree-trunk is tolerably flat; the free surface, on the contrary, is strongly convex and thickly covered, as also is the door, with particles of bark. The shape of the cavity corresponds to that of the outside and of the door. The door, which is slender and with upturned edges, is wider one way than the other, i. e. its width from the hinge to the margin opposite to it is less than the width taken along a line at right angles to this measurement. It opens outwards and closes by the elasticity of its hinge. When closed the plane of its outer surface meets that of the trunk of the tree at an angle of about 45°.

Note 1.—In the nest of Actinopus scalops, which Mr. Hart sent with the specimens of this species, the hinge of the door is strengthened and protected by thick tough layers of greenish silk, so that the area above the hinge projects far above the rest of the surface of the door (Pl. XIX. fig. 3).

Note 2.—Mr. Hart forwarded with the specimens of *Argiope argentata* examples of the cocoons of that species. These cocoons show an interesting variation in colouring, being either bright yellow or green on both sides or green on one side and yellow on the other.

EXPLANATION OF PLATE XIX, FIGS. 1-3.

Fig. 1. Pseudidiops Hartii, sp. n., nat. size. 1 a. Lateral view of carapace.
1 b. Lateral view of upper part of carapace, to show arrangement of eyes and disposition of setæ. 1 c. Labium.
1 d. Pseudidiops rastratus (Cambr.), for comparison with fig. 1 b.
Fig. 2. Nest of Pseudidiops Hartii, sp. n.

Fig. 3. Nest of Actinopus scalops, Simon.